



Estimating the economic impact of climate change on cardiovascular diseases-evidence from Taiwan

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Abstract:

The main purpose of this study was to investigate how climate change affects blood vessel-related heart disease and hypertension and to estimate the associated economic damage. In this paper, both the panel data model and the contingent valuation method (CVM) approaches are applied. The empirical results indicate that the number of death from cardiovascular diseases would be increased by 0.226% as the variation in temperature increases by 1%. More importantly, the number of death from cardiovascular diseases would be increased by 1.2% to 4.1% under alternative IPCC climate change scenarios. The results from the CVM approach show that each person would be willing to pay US\$51 to US\$97 per year in order to avoid the increase in the mortality rate of cardiovascular diseases caused by climate change. © 2010 by the authors; licensee MDPI, Basel, Switzerland.

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Resource Description

Climate Scenario :

specification of climate scenario (set of assumptions about future states related to climate)

Special Report on Emissions Scenarios (SRES)

Special Report on Emissions Scenarios (SRES) Scenario: SRES A1, SRES A2, SRES B1, SRES B2

Exposure :

weather or climate related pathway by which climate change affects health

Meteorological Factors, Precipitation, Temperature

Temperature: Extreme Cold, Extreme Heat, Fluctuations

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

Climate Change and Human Health Literature Portal



resource focuses on specific location

Non-United States

Non-United States: Asia

Asian Region/Country: Other Asian Country

Other Asian Country: Taiwan

Health Impact:

specification of health effect or disease related to climate change exposure

Cardiovascular Effect, Morbidity/Mortality

Cardiovascular Effect: Heart Attack, Other Cardiovascular Effect

Cardiovascular Disease (other): Hypertension; Heart disease

Model/Methodology:

type of model used or methodology development is a focus of resource

Cost/Economic, Outcome Change Prediction

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Elderly, Low Socioeconomic Status

Other Vulnerable Population: Education status

Resource Type:

format or standard characteristic of resource

Research Article

Timescale:

time period studied

Long-Term (>50 years)

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content